

IN THE CLAIMS:

This listing of the claims replaces all prior versions and listings of the claims. Please amend claims 1, 5, 6, 9, 12 and 15, add claims 29-31, and cancel claims 16, 17, 20-22 and 25-28 as follows:

1 Claim 1. (currently amended) Method for generating persistent
2 annotations of multimedia content, comprising one or more repetitions
3 of the following steps:
4 actively selecting examples of multimedia content to be annotated
5 by a user, wherein the examples of multimedia content are selected
6 based on at least one criterion for achieving a maximal disambiguation
7 result such that only those examples which are most ambiguous are
8 selected, the at least one criterion including a quantitative measure
9 of confidence in a label;
10 accepting input annotations from said user for said selected
11 examples;
12 propagating said input annotations to other instances of
13 multimedia content; and
14 storing said input annotations and said propagated annotations.

1 Claim 2. (original) The method of claim 1, wherein the step of
2 actively selecting is performed using a selection technique selected
3 from the group consisting of: deterministic and probabilistic.

Claims 3 and 4. (canceled)

1 Claim 5. (currently amended) The method of claim 1, wherein an
2 optimization criterion for active selection includes ~~one or more~~
3 ~~criteria selected from the group consisting of:~~ information measures
4 ~~and confidence.~~

1 Claim 6. (currently amended) The method of claim 1, wherein the
2 multimedia content comprises one or more types selected from the group
3 consisting of: ~~images,~~ audio, video, ~~graphics,~~ text, ~~multimedia,~~ Web
4 pages, time series data, surveillance data, sensor data, ~~relational~~
5 ~~data,~~ and XML data.

1 Claim 7. (original) The method of claim 1, wherein the input
2 annotations are created by a user with reference to a vocabulary.

1 Claim 8. (original) The method of claim 7, wherein the
2 vocabulary contains one or more items selected from the group
3 consisting of: terms, concepts, labels, and annotations.

1 Claim 9. (currently amended) The method of claim 1, wherein the
2 process of creating input annotations by the user involves multimodal
3 interaction with the user ~~using graphical, textual, and/or speech~~
4 ~~interface.~~

1 Claim 10. (original) The method of claim 1, wherein the input
2 annotations are created by means of steps selected from the group
3 consisting of: creating new annotations, deleting existing annotations,
4 rejecting proposed annotations, and modifying annotations.

1 Claim 11. (original) The method of claim 7, wherein the
2 vocabulary is adaptively or dynamically organized and/or limited by the
3 system or the user.

1 Claim 12. (currently amended) The method of claim 9, wherein the
2 multimodal interaction involves one or more elements selected from the
3 group consisting of: ~~speech recognition,~~ gaze detection, finger
4 pointing, expression detection, and/or effective computing methods for
5 sensing a user's state.

1 Claim 13. (original) The method of claim 1, wherein the
2 determination of the propagation of annotations is made
3 deterministically or probabilistically and on the use of models for
4 each annotation or for joint annotations.

1 Claim 14. (previously presented) The method of claim 13, wherein
2 the models are created or learned automatically or semi-automatically
3 and/or are updated adaptively from interaction with the user.

1 Claim 15. (currently amended) The method of claim 13, wherein
2 the models are based on nearest neighbor voting or variants, ~~parametric~~
3 ~~or statistical models, expert systems, rule-based systems, or hybrid~~
4 ~~techniques.~~

 Claims 16-22. (canceled)

1 Claim 23. (previously presented) The method of claim 1, wherein
2 the at least one criterion includes an ambiguity level of the selected
3 examples.

1 Claim 24. (previously presented) The method of claim 1, wherein
2 the at least one criterion includes a confidence level of the selected
3 examples, the confidence level being inversely proportional to a
4 distance of a new feature of the selected examples from a separating
5 hyperplane in an induced higher dimensional feature space.

 Claims 25-28. (canceled)

1 Claim 29. (new) The method of claim 13, wherein the models are
2 based on expert systems.

1 Claim 30. (new) The method of claim 13, wherein the models are
2 based on rule-based systems.

1 Claim 31. (new) The method of claim 13, wherein the models are
2 based on hybrid techniques.